35

36

cator is associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes:

instructions for transmitting the quality indicator to the base station; and

instructions for receiving data as a function of the quality indicator.

27. A method in a communication system, comprising: transmitting a pilot from a base station;

receiving a quality indicator determined based on the pilot, wherein the quality indicator is associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes; and

transmitting data from the base station as a function of the quality indicator.

28. The method as in claim **27**, wherein transmitting data comprises:

transmitting data based further on knowledge of the presence or absence of data transmissions.

29. An apparatus for a wireless communication system, comprising:

means for transmitting a pilot from a base station;

means for receiving a quality indicator determined based on the pilot, wherein the quality indicator is associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes; and

means for transmitting data from the base station as a function of the quality indicator.

30. The apparatus as in claim **29**, wherein the means for transmitting data comprises:

means for transmitting data based further on knowledge of the presence or absence of data transmissions.

- 31. The apparatus as in any of claims 29 to 30, wherein the apparatus is a non-transitory computer-readable medium encoded with a computer program configured to increase data throughput and efficiency when coupled to a computing device.
- **32**. A non-transitory computer-readable medium encoded with a computer program for a communication system, comprising:

instructions for transmitting a pilot from a base station; instructions for receiving a quality indicator determined based on the pilot, wherein the quality indicator is associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes; and instructions for transmitting data from the base station as a

instructions for transmitting data from the base station as a function of the quality indicator.

33. An apparatus for wireless communication, comprising: at least one processor configured to receive a pilot from a base station, to measure channel quality of a link in a communication system based on the pilot received from the base station, to determine a quality indicator based on the channel quality of the link, wherein the quality indicator is associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes, to transmit the quality indicator to the base station, and to receive data as a function of the quality indicator.

- **34**. The apparatus as in claim **33**, wherein the at least one processor is configured to periodically measure Carrier-to-Interference (C/I) of the link.
- **35**. The apparatus as in claim **34**, wherein the at least one processor is configured to measure Carrier-to-Interference (C/I) of the link at every time slot.
- 36. The apparatus as in claim 33, wherein the at least one processor is configured to receive data transmitted based onthe modulation format.
 - 37. The apparatus as in claim 33, wherein the quality indicator comprises an index specifying the modulation format.
 - 38. The apparatus as in claim 33, wherein the at least one processor is configured to determine a data rate based on the channel quality, to determine the modulation format as a function of the data rate, and to determine the quality indicator as a function of the data rate and the modulation format.
 - **39**. The apparatus as in claim **38**, wherein the modulation format is associated with at least one data rate in a set of data rates
 - **40**. The apparatus as in claim **33**, wherein the quality indicator is further associated with a data rate in a set of data rates.
 - **41**. The apparatus as in claim **33**, wherein the modulation format comprises quadrature phase shift keying (QPSK).
 - **42**. The apparatus as in claim **33**, wherein the modulation format comprises quadrature amplitude modulation (QAM).
 - **43**. The apparatus as in claim **33**, wherein the modulation format comprises 16 quadrature amplitude modulation (16-QAM).
 - **44**. The apparatus as in claim **33**, wherein the pilot is a common pilot sent to a plurality of terminals.
 - 45. An apparatus for wireless communication, comprising: at least one processor configured to transmit a pilot from a base station, to receive a quality indicator determined based on the pilot and associated with a modulation format in a set of modulation formats and a packet size in a set of packet sizes, and to transmit data from the base station as a function of the quality indicator.
 - **46**. The apparatus as in claim **45**, wherein the at least one processor is configured to transmit data based further on knowledge of the presence or absence of data transmissions.

* * * * *